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WINE.

RETURN to an Order of the Honourable The House of Commons, dated 7 April 1862;—*for*,

COPY or EXTRACTS "of any REPORTS of an INQUIRY, under the Authority of the British Government, in the Year 1861, into the Strengths of WINE in the Principal WINE-GROWING COUNTRIES in *Europe*."

(*Mr. Crawford.*)

LIBRARY OF THE UNIVERSITY OF CALIFORNIA

Ordered, by The House of Commons, *to be Printed*, 29 *April* 1862.

CONTENTS.

Subject.	Page.
Report on the Wines of France and Switzerland - - - - -	1
Particulars of Samples - - - - - - - - - - -	9
Supplementary Report - - - - - - - - - - -	11
Report on the Wines of the Rhine Provinces, Bavaria, Hungary, and Austria - - - - - - - - - - - - -	13
Particulars of Samples - - - - - - - - - - -	17
Report on the Wines of Spain and Portugal - - - - - -	18
Particulars of Samples - - - - - - - - - - -	23
Statement with respect to the Wines of Sicily and Italy - - - -	26
Particulars of Samples - - - - - - - - - - -	28
Summary - - - - - - - - - - - - -	29

COPY of REPORTS with respect to the WINES of *France* and *Switzerland*; of the *Rhine Provinces*, *Bavaria*, *Hungary*, and *Austria*; of *Spain* and *Portugal*; and of *Sicily* and *Italy*.

REPORT with respect to the WINES of *France* and *Switzerland*, by Mr. *R. A. Ogilvie*, Inspector General of the Out-door Department, Her Majesty's Customs, London.

Honourable Sirs,

I BEG to lay before the Board an account of the samples of French and Swiss wine which I have recently collected in the various places of their production, and which have been subsequently tested by the practical officers of this department in the laboratory in London; and I may here state that these samples are not intended to represent the general production of the countries of their growth, but simply such wines as are known to contain, in their natural condition, the greatest quantity of spirit, the immediate object of my mission being to inquire as to the greatest natural strength of wines.

France and Switzerland.

With this view, I restricted my inquiries to the South Eastern and Southern Districts of France, commencing at Meursault, near Beaune, in the Burgundy district, and travelling south as far as Perpignan, at the foot of the Pyrenees, and then, on my return, crossing to Bordeaux. Wine is most abundantly produced in those parts of the country, but it is also produced in almost all parts of France, even in districts where the soil and climate are unfavourable to the culture of the vine; the exemption from duty accorded to wine that is consumed by the producers on the spot of production, being a great inducement to grow sufficient for that purpose alone.

French Wines.

I annex a Table (A.) of the total production of wine in France in various years, from which it will be seen that the quantity varies considerably according to the weather and other circumstances; thus, in 1847, the produce was upwards of 54,000,000 hectolitres, or 1,188,000,000 gallons, but in 1854, owing to the disease that made such ravages among the produce of the vines throughout Europe, the total production dropped below 11,000,000 hectolitres, or 242,000,000 gallons, being about one-fifth part of the former year. The crops of this year (1861) will be large, and the quality good, in every part of France except Bordeaux, where the severe frosts in the early part of the year, the extreme heat in the latter part of the summer, and the oidium or disease have made great havoc among the vines in the low-lying places, though the vines on the high grounds, which produce the finest and most valuable wines, have generally escaped. The crop of last year, 1860, owing to the quantity of rain that fell throughout the summer, was abundant, but the quality of the wine was very inferior and weak; for which reason I did not take any samples of that year.

The proportional quantity produced in different parts of France differs considerably; in the department of the Jura this year, the produce will be about 6 ½ hectolitres per hectare, or about 57 gallons per acre; while on the other side of France, in the Charente Inférieure, it is estimated at 10 hectolitres per hectare, or 88 gallons per acre, and in some parts the produce, it is said, reached 60 hectolitres per hectare. In 1858, the total production of France averaged 25 hectolitres per hectare, or about 220 gallons per acre; in the following year it was only about 14 hectolitres per hectare, or 123 gallons per acre. Owing to the very high price of wine, a very considerable quantity of land in the wine-producing countries has been planted with vines during the last two years, and when this land begins to bear, which will not be until the third year, the crops will be proportionally increased. The high prices of wine, the great extension of railroads in France during the last few years, and the opening of the export trade to England under the provisions of the treaty of last

France and Switzerland.

French Wines.

watched, to prevent its being carried too far. The principle on which this process is based is, that water freezes more readily than spirit or wine. The water naturally contained in wine is in part frozen, and thereby separated, when it is taken out and thrown away, by which the bulk of the wine is decreased, and all its properties condensed and made more perceptible; but as the bad qualities are condensed as well as the good, this operation is only useful in very fine and faultless wines. In the same district a quantity of raw sugar is often mixed with the grapes at the time of pressing, the object being to give body, and to hasten the fermentation. This addition of sugar must, to a certain extent, increase the quantity of spirit in the wine, but I was assured on good authority that it does so only to a very trifling extent, and short of the quantity that would be produced by simply fermenting an equal quantity of sugar in water, the wine decomposing the sugar, and preventing its fermentation. In the only instance of this process which came under my notice, about half-a-hundred weight of sugar was added to each 100 gallons of wine.

As a general rule, under the Excise laws of France wine is not allowed to be fortified for home consumption, nor is it treated as wine in regard to the inland duties, if the strength exceed 18 degrees of pure spirit according to Gay Lussac's scale, or about 28 per cent. of proof spirit; but by a decree of 17th March 1852, spirit is allowed to be added free of Excise duty, to the extent of five per cent. by volume, to wines of the departments of the Eastern Pyrenees, the Aude, the Tarn, the Hérault, the Gar, and the mouths of the Rhone, provided that the strength of the wine shall not thereby be rendered above 18 per cent. of Gay Lussac's scale; but if the strength exceed 18 per cent, and is under 21 per cent., then each degree between 18 and 21 is charged with the double duty. All such wines above 21 per cent. are subjected to duty as spirit. By the same decree, all wines for exportation may be fortified to an unlimited extent; and under this regulation most wines, and especially those of the five districts specified above, are fortified with spirit before being exported. The Roussillon wines are fortified for exportation to Brazil to the extent of 50 litres, or 11 gallons of spirit, of about 50 per cent. over-proof, to 510 litres, or 111 gallons; and for England 40 litres are usually added to 535 litres.

The wines of Bordeaux, though far from strong, possess the peculiar property, in which they are said to differ from all other French wines, of not only withstanding the effect of the sea without deterioration, but are actually improved by long voyages, for which reason they are highly esteemed in India, the United States, and South America. They also decrease in strength with age, which is not the case with other French wines. In the process of making wine, plaster of Paris or gypsum (sulphate of lime) is often added to the grapes in the press, the effect of which is to produce a brilliant, lively colour; but it will have no other effect, and is perfectly harmless, provided the gypsum is pure. The same substance is also added in small quantities when the wine is beginning to turn sour, as it stops the acetous fermentation.

In France, the pressure of the Imperial and Municipal duties on wine leads to its sophistication to a considerable extent. It is frequently mixed with spirit in the first instance, because, if not exceeding the strength of 18 per cent. of Gay Lussac's scale, it is assessed with duty only as wine, and after it has passed the *douane*, it is then mixed with water to increase its quantity; and as most of the ordinary wines do not exceed 9 or 10 per cent., two casks may be thus made out of one. The dark-coloured wines of the south are also frequently mixed with the cheaper sorts of white wine, or with the lighter and cheaper red wines of the north. These frauds on the revenue and the public are, however, confined to the lower class of dealers, and are never attempted by the proprietors or producers, or even the more respectable wholesale dealers.

The present scale of duties on wine imported into the United Kingdom is a source of general complaint throughout France, chiefly owing to its unequal pressure on their wines, the finest and most valuable of which are admitted at the lowest rate, while the less valuable kinds are so much more highly taxed. It appears to be the general idea, however, of parties interested in this question, that 14° of Gay Lussac, as the limit of the 1*s*. duty, would be quite sufficient to admit the greatest bulk of the wines of France at that rate. The only exception I met with to that opinion was in the district of the Eastern Pyrenees, where they seemed to think that we should admit their wines at the strength to

France and Switzerland.

to which they usually fortify them for exportation, which would amount to about 32° of Sikes.

French Wines.

Having adverted to the different modes of expressing the strength of wines adopted in England and France, it may not be out of place to give some slight explanation of these two modes. In both countries the operation of testing or trying the strength is by distillation of a determined quantity, and then taking the temperature and density of the distillate by thermometers and hydrometer; but here the similarity ends. The instruments, as used respectively in the two countries, differ essentially; and, therefore, the results are shown in different terms. In England, Fahrenheit's thermometer and Sikes' hydrometer are used; in France, the Centigrade thermometer and Gay Lussac's hydrometer. These thermometers differ in the fact that the range between the temperature of frozen and boiling water is divided in the latter (Centigrade) into 100 parts or degrees, and in the former into 180. Gay Lussac's hydrometer is graduated, to show 100 divisions or degrees between absolute alcohol of ·796 specific gravity, at 15·5 Centigrade or 60° Fahrenheit, and pure water; while the scale of Sikes' hydrometer starts from a definite mixture of water and pure alcohol, nearly in equal volumes, having a specific gravity of ·920 at 60° Fahrenheit, and called proof spirit; and the instrument shows whether the spirit under test is of greater or less strength than such proof.

In various scientific works Tables are given of the equivalent degrees of these two scales, but none of these Tables exactly correspond. The following figures, however, are taken from the best authority, and are very nearly exact:—

SIKES.	GAY LUSSAC.	SIKES.	GAY LUSSAC.
1	0·5	16·5	9·75
2	1	18	10·5
3	2	19	11·5
4	3	20	12
4·5	3·5	21·5	13
5	4	23	14
6·5	5	24	15
8	6	25	16
9·5	6·5	26·5	17
11	7	28	18
13	8	30	19
15	9	32	20

I cannot conclude this report without putting on record my acknowledgments of the great attention and politeness I everywhere experienced, and the readiness with which all the cellars and stores of the various proprietors were thrown open to me, and everything explained, and every question frankly and fully answered. Throughout my journey, everywhere that I had occasion to apply for samples, they were most willingly given or sold; and by all with whom I came in contact I was greeted with expressions of an earnest desire that the commercial relations between the two countries might be extensively cultivated, and be productive of lasting peace and good-will.

Swiss Wines.

With regard to Swiss wines, the vine is cultivated in many parts of Switzerland for the consumption of the growers, but the districts where any considerable quantity of wine is produced are those around Neuchâtel, on each side of the Lake of Geneva, and also on the slopes of the hills between Culoz and Geneva, and at the foot of the mountains to the north of the latter town; the climate is, however, too cold to produce any superior qualities. Between Neuchâtel and the Jura the Burgundy vines have been planted, but the wine is far inferior both in flavour and strength. The total quantity produced in Switzerland is not sufficient for the consumption of its population: no trade, therefore, can be expected with this country. Some of the wines are of tolerable flavour, but all are of inferior strength. In many places around Geneva the vine is cultivated for the sake of selling the grapes, to be eaten as fruit. I obtained some samples of wine from the hills on the south of the Lake of Geneva, and also from the vineyards to the north of that town, which may be taken as fair specimens of Swiss wine.

Samples Nos. 17 to 19.

I have, &c.

25 November 1861. (signed) *R. A. Ogilvie.*

(A.)—ACCOUNT of Production and Consumption of Wines in *France*, from 1788 to 1860.

Year.	Number of Hectares planted with Vines.	Resources of the Country.			Home Consumption and Operations.						Total.
		Approximate Quantity Produced.	Quantity Imported.	Total.	Quantity subject to Duty.	Quantity Exported.	Quantity Distilled by the Trade.	Quantity Distilled by Growers.	Quantity Converted into Vinegar.	Consumption, Free of Duty, in the Districts where grown.	
		Hectolitres.	*Hectolitres.*	*Hectolitres.*	*Hectolitres.*	*Hectolitres.*	*Hectolitres.*	*Hectolitres.*	*Hectolitres.*	*Hectolitres.*	*Hectolitres.*
1788	1,567,700	25,000,000	- -	25,000,000	- -	- -	- -	- -	- -	5,000,000	—
1808	1,613,939	28,000,000	- -	28,000,000	- -	1,012,000	- -	- -	- -	6,000,000	—
1827	1,613,939	36,819,000	- -	36,819,000	12,297,000	1,070,000	- -	- -	- -	8,000,000	—
1829	2,003,365	30,973,000	- -	30,973,000	12,760,000	1,115,000	- -	- -	- -	8,000,000	—
1830	2,003,365	15,282,000	- -	15,282,000	10,368,000	875,000	- -	- -	- -	4,000,000	—
1835	2,118,709	26,496,000	- -	26,496,000	14,929,000	1,301,000	- -	- -	- -	5,000,000	—
1840	1,960,756	45,486,000	- -	45,486,000	16,122,000	1,334,000	5,760,000	3,500,000	- -	13,000,000	39,716,000
1845	1,960,756	30,140,000	- -	30,140,000	16,687,000	1,483,000	3,840,000	2,000,000	- -	10,000,000	34,010,000
1847	1,960,756	54,316,000	- -	54,316,000	17,645,000	1,488,000	4,800,000	2,500,000	- -	10,000,000	36,433,000
1848	1,960,756	51,622,000	- -	51,622,000	17,917,000	1,548,000	6,400,000	4,600,000	500,000	12,000,000	42,965,000
1849	2,193,083	35,555,000	- -	35,555,000	20,847,000	1,872,000	7,840,000	3,260,000	- -	17,000,000	50,819,000
1850	2,193,083	45,266,000	- -	45,266,000	20,832,000	1,911,000	5,840,000	2,800,000	- -	11,000,000	42,383,000
1851	2,169,165	39,429,000	- -	39,429,000	21,167,000	2,269,000	5,230,000	3,000,000	- -	14,000,000	52,666,000
1852	2,158,854	28,636,000	3,500	28,639,500	19,772,000	2,439,000	3,900,000	2,000,000	- -	11,000,000	39,121,000
1853	2,188,427	22,662,000	4,500	22,666,500	16,673,000	1,976,000	2,160,000	1,800,000	- -	9,000,000	31,609,000
1854	2,178,129	10,824,000	121,400	10,945,400	12,811,000	1,382,000	1,870,000	2,470,000	172,000	6,000,000	24,705,000
1855	2,175,084	15,175,000	417,000	15,592,000	10,342,000	1,215,000	940,000	550,000	235,000	3,500,000	12,782,000
1856	2,170,307	21,294,000	341,000	21,635,000	12,315,000	1,275,000	570,000	600,000	200,000	3,500,000	18,460,000
1857	2,180,094	35,410,000	626,000	36,036,000	13,642,000	1,123,000	1,330,000	1,000,000	200,000	3,500,000	20,595,000
1858	2,183,809	53,919,000	114,000	54,033,000	18,569,000	1,620,000	2,633,000	4,166,000	225,625	4,000,000	31,213,625
1859	2,173,281	29,890,542	129,000	30,019,542	21,592,000	2,519,000	6,075,640	2,719,000	252,300	4,000,000	37,157,940
1860	2,205,409	39,558,450	183,000	39,741,450	17,053,000	2,021,000	726,000	599,000	192,955	4,000,000	24,591,955

N.B.—The Hectare is equal to 2 ½ English acres, and the hectolitre is equal to 22 gallons (English).

(B.)—ACCOUNT of Retail Prices of Wines in *France*, from 1806 to 1860.

Year.	Retail Price per Hectolitre.	Year.	Retail Price per Hectolitre.	Year.	Retail Price per Hectolitre.	Year.	Retail Price per Hectolitre.	Year.	Retail Price per Hectolitre.	Year.	Retail Price per Hectolitre.	Year.	Retail Price per Hectolitre.	Year.	Retail Price per Hectolitre.	Year.	Retail Price per Hectolitre.	Year.	Retail Price per Hectolitre.
	Francs.		*Francs.*		*Francs.*		*Francs.*		*Francs.*		*Francs.*		*Francs.*		*Francs.*		*Francs.*		*Francs.*
1806	26.00	1811	40.48	1821	39 36	1826	41.09	1831	40.62	1836	33 22	1841	32.62	1846	40.82	1851	28.95	1856	62.88
1807	26.20	1812	39.37	1822	38.12	1827	33.46	1832	38.72	1837	32.59	1842	32.55	1847	40.85	1852	32.88	1857	63.67
1808	27.30	1813	40.64	1823	39.00	1828	31.09	1833	35.61	1838	32.43	1843	35.42	1848	28.45	1853	40.90	1858	48.55
1809	27.06	1819	38.35	1824	37.20	1829	30.60	1834	30.45	1839	35.49	1844	41.04	1849	25.78	1854	52.17	1859	44.48
1810	35.27	1820	32.27	1825	37.40	1830	35.35	1835	36.56	1840	35.79	1845	39.93	1850	28.08	1855	60.90	1860	57.30

PARTICULARS of Samples of WINE obtained in *France* and *Switzerland* by Mr. *Ogilvie*.

Number of Sample.	Estate or District.	Obtained from	Year of Vintage.	Strength.	OBSERVATIONS.
R. A. O.					
1	Mont Rachet - - -	M. Serre, proprietor -	1858	23·3	Nos. 1 to 10 and 12 represent the justly celebrated and important wines produced at the foot and on the sides of the mountains, called the "Côtes d'Or," situated in the eastern centre of France. These wines, known in England under the general denomination of Burgundy, include some of the finest and most costly kinds produced in France. Their especial qualities are fine flavour, body, and strength. On some estates in this district it is the practice to add a quantity of sugar to the juice of the grapes. The three first samples have been so treated, and perhaps some of the others, but not all. No. 12, I was assured, had not. Nos. 1 and 2 have also been subjected to the process of freezing, which must increase in a small degree the strength of the wine.
2	Clos de Beze, Chambertin	M. Serre, proprietor -	1858	23·3	
3	Clos des Chênes, Volnay -	M. Serre, proprietor -	1859	22·7	
4	Chambertin - - -	M. Serre, who obtained them direct from M. Ouvrard, proprietor.	1859	20·8	
5	Clos Vougeot - -		1859	20·8	
6	Richebourg - - -	M. Serre, who obtained them direct from the proprietors - -	1859	23·3	
7	Corton - - - -		1858	24·6	
8	Volnay - - - -		1859	23·9	
9	Auxey - - - -		1859	19·6	
10	Beaune (good ordinary) -		1858	19·6	
11	Pouilly (white, first quality)	M. Serre, who obtained it direct from Mde. de Lacretelle, proprietress.	1859	22·0	
12	Clos de Santenot - -	Baronne de Sottende, proprietress.	1858	22·7	
13	Chenas - - - -	M. Collosseau, vigneron to Marquis d'Hareng, proprietor - - -	1858	21·4	Nos. 11 and 13 to 16 represent the wines grown in the department of the "Saône and Loire," and Rhone, among the mountains to the south of the Burgundy country, and denominated Maconnais and Beaujolais, from the towns of Macon and Beaujeu. These wines show a considerable strength, particularly those grown on the mountains, as Chenas, Nos. 13 and 14.
14	Chenas - - - -		1859	22·7	
15	Juliénas - - - -	Mde. de Blondel, proprietress	1858	20·8	
16	Juliénas - - - -	M. de Riessier, proprietor	1859	18·3	
	Clos de Vigne franche, Beaune.	Baron de Gravier, proprietor.	1858	20·8	These two samples were forwarded to me by the proprietors after my leaving the district; they represent that kind of Burgundy known as "Vin de Beaune," from being produced in the immediate vicinity of that town; and although unaccompanied by any certificate,* I am satisfied they are pure and genuine.
	Clos des Cloux, Beaune -	Baron de Loyère, proprietor.	1859	21·4	
17	Crepi, Commune de Colluges.	M. Grund, proprietor -	1859	15·4	These three samples are Swiss wines, from the vicinity of Geneva. The first two were procured from the vineyards on the hills, on the south side of the lake, and were selected as likely to be, from position and soil, the strongest of that locality. The third was produced on the estate of the Château de Ferney, about five miles to the north of Geneva, where the situation and soil are both better adapted for the cultivation of the vine.
18	Crepi, Commune de Colluges.	M. Grund, proprietor -	1861	17·1	
19	Château de Ferney (white)	M. David, proprietor -	1859	18·3	
20	Croze, Department du Drome.	M. Griollat, proprietor -	1858	20·8	The wines Nos. 20 to 25, known as "Vins des Côtes du Rhone," are produced along the valley of that river, beginning about 55 miles below Lyons, on the sides of the limestone rocks forming the high mountains in this locality. These wines are all of fine flavour, full-bodied, and strong. The majority are known and sold in Paris and England as "Hermitage," on account of their being produced in the vicinity of the vineyard so called, from its being on the side of a high hill at the top of which there is still a small ruin, said to have been once the residence of a celebrated hermit. The whole side of this hill is covered with vineyards, mostly belonging to small proprietors; but the portion which produces the finest quality, the veritable Hermitage, is situated about the centre of the hill. It is inclosed within a wall, and is the property of M. Monier de la Sizeranne, from whom I obtained a sample (No. 25), this sample is of the vintage of 1850. The crop of that year was very fine in every respect; and in order to enhance the value and quality of the wine, the grapes were allowed to become fully ripe before being gathered. It was considered by the proprietor that this was the finest and strongest wine ever produced on the estate; and that, notwithstanding its age, it still retained its strength: an opinion confirmed by the test in this country, the sample showing 25·2 per cent. of proof spirit; a strength greater than any previously obtained among the wines of more northern growth. In the certificate for this sample (No. 25) it is merely described as "provenant de mes propriétés" without stating the essential fact generally mentioned in the other certificates, that it was in its natural condition, without addition of spirit. M. Monier de la Sizeranne assured me such was the case, but rather indignantly declined to specify it in the certificate, as he said it was well known that all his wines were genuine.
21	Croze, Department du Drome.	M. Griollat, proprietor -	1861	19·6	
22	Mauves (L'Ardéche) -	M. Feray, proprietor -	1859	20·8	
23	Cornas, St. Peray - -	Mme. de Jaboulet, proprietress.	1859	23·9	
24	St. Joseph - - -	M. Reynaud, proprietor -	1859	22·0	
25	Hermitage (red) - -	M. Monier de la Sizeranne, proprietor.	1850	25·2	
26	St. Gilles (Du Gard) -	M. Perouze, proprietor -	sundry years, mixed.	27·2	Descending the valley of the Rhone, the next important wine-producing district is the "Department du Gard," situated to the north-west of the mouths of the Rhone. The wines produced at St. Gilles, on the property of M. Perouze, the deputé, are said to be the strongest grown in the district, and indeed amongst the strongest produced in any part of France. M. Perouze received me with the greatest urbanity, and readily furnished me with samples (Nos. 26 and 27), the former of which was drawn from a large cask containing the wines of many vintages; a certain quantity being withdrawn every year, and replaced by a similar quantity of good wine four or five years old. This wine, with one exception, is the strongest red wine I was able to obtain in France, showing a strength of 27·2 per cent. of proof spirit. The other sample is of the wine of this year, which was not completely made when taken, being then in a state of fermentation; and the comparatively low strength shown, viz. 22·0, is in a great measure to be attributed to the fact that the time was not sufficient for the perfect elaboration of the spirit before the sample was tested. The third sample (No. 28) from this district, is the ordinary wine of the country, and, as such, shows a greater strength than the ordinary wine of most other districts, being 22·7. In this case the proprietor of the vineyard in which it was produced gave me a certificate that the wine was of his growth (récolte); but declared that as he was a proprietor and not a dealer, he should consider it an insult to be obliged to state further that it was not sophisticated.
27	St. Gilles (Du Gard) -	M. Perouze, proprietor -	1861	22·0	
28	Courbessac - - -	M. Boyer, proprietor -	1859	22·7	

* The samples obtained were, in most instances, accompanied with attested certificates of the proprietors, that the wine was in its *natural* condition, without any addition of spirit.

PARTICULARS of Samples of Wine obtained in *France* and *Switzerland* by Mr. *Ogilvie*—continued.

Number of Sample.	Estate or District.	Obtained from	Year of Vintage.	Strength.	OBSERVATIONS.
R. A. O.					
29	Vevier - - - -	M. Pagesy, proprietor -	1861	16·5	After the valley of the Rhone, the next important district is that of the "Hérault," the wines of which are reported to be among the strongest produced in France, for which reason I devoted much time and attention to obtain a sufficient number of samples.
30	Buzreins - - -	M. Fournel, proprietor -	1859	23·9	
31	Buzreins - - -	M. Fournel, proprietor -	1861	20·2	
32	Assas - - - -	M. Pinche, proprietor -	1859	22·0	
33	Assas - - - -	M. Pinche, proprietor -	1861	20·2	Nos. 29 to 43 represent the wines grown in the northern portion of this important district in the vicinity of Montpellier. Among these wines are those of St. George, which are well known, and of which I obtained samples from three different proprietors, Nos. 39 to 43; and there are two samples from the same district, which have been forwarded by the Mayor of St. George since I left. These wines do not show so great a strength as I was led to expect, ranging, with one exception, from 16·5 to 23·9, the majority not exceeding 22. It must be observed, however, that a large portion of them are of the present year, and consequently that the whole of the spirit may not have had time to develope itself. But there are others of sufficient age to furnish a fair specimen of the character of the wines of this district.
34	Grammont (red) - -	Mde. de Bricogne, proprietress.	1861	19·6	
35	Grammont (white Piquepoul).	Mde. de Bricogne, proprietress.	1861	22·0	
36	Grammont (red) - -	Mde. de Bricogne, proprietress.	1855	20·8	
37	Grammont (white) - -	Mde. de Bricogne, proprietress.	1847	27·2	
38	Mont Plaisir, Lodéve Common.	Mde. de Fournier, proprietress.	- -	17·7	
39	St. George - - -	M. St. Pierre, proprietor -	1861	18·3	
40	St. George - - -	M. St. Pierre, proprietor -	1859	17·1	
41	St. George - - -	M. Poujol, proprietor -	1861	22·0	The exception above alloded to is No. 37; white wine, and one of those produced on the estate of Madame de Bricogne at Grammont. These wines are well known and highly appreciated; but these, and indeed most other white wines, cannot be regarded in the same light as red wines, because they (the white) are usually made from very ripe grapes, which have been left so long on the vine that a large portion of the water contained naturally in their juice is dried up, or evaporated, while the proportion of saccharine matter is largely increased, which saccharine matter for a long time continues to ferment, and turn to spirit, even after the wine has been bottled, and this is the case with the wine in question, No. 37, and accounts for its great strength, notwithstanding its age, about 14 years.
42	St. George - - -	M. Courty, proprietor -	1861	19·6	
43	St. George - - -	M. Courty, proprietor -	1858	21·4	
Sent in a box addressed to the Commissioners of Customs:					
1 bottle	St. George - - -	- - - - -	1858	20·8	
1 bottle	St. George - - -	- - - - -	1861	20·8	
R. A. O.					
44	Cers - - - -	M. Belpel, proprietor -	1861	18·9	Nos. 44 to 49 represent the wines grown in the southern part of the "Hérault," around the town of Beziers. These are all full-bodied and powerful wines, and are remarkable for their deep, rich colour, on which account they are much used for blending with the lighter wines, and even with the white wines of other parts of France. Among the vineyards of this district, the vines attain the greatest luxuriance of growth, but here, as in many other parts, quantity of produce is more sought than quality. No. 47, Muscat, is one of the "vins de liqueur," as they are termed, made from grapes which are allowed to remain on the vine till they are as dry and as dark as those known in England under the denomination of raisins. Among this parcel are samples of Piquepoul, a wine cultivated very generally through the south, named from the peculiar species of vine producing it, No. 49. Picardin is also a sweet wine, but neither this, nor No. 47, show so great a strength as I was led to expect.
45	Rouge de Montagne -	M. Daurel de Maranssan, proprietor.	1861	18·9	
46	Rouge d'Aramon - -	M. Daurel de Maranssan, proprietor.	1861	17·1	
47	Muscat - - - -	M. Daurel de Maranssan, proprietor.	1859	23·3	
48	Piquepoul - - -	M. Daurel de Maranssan, proprietor.	1857	23·3	
49	Picardin - - - -	M. Daurel de Maranssan, proprietor.	1848	20·2	
50	Narbonne - - -	M. Rosier, President of the Tribunal of Commerce, who obtained them direct from the proprietors.	1861	22·7	These wines are grown still further south in the department of the Aude, and are of similar qualities to the preceding samples; very deep coloured, strong, with considerable body.
51	Narbonne - - -		1861	23·3	
52	Médoc - - - -	The cellars of Messrs. Ballaresque, who obtained them direct from the producers.	1858	17·7	These four samples represent the different qualities of wine produced in the Bordeaux district. These wines are more celebrated for their fine and delicate flavour and bouquet, than for their alcoholic strength, but from their commercial importance I deemed it incumbent on me in this inquiry to show their actual strength. These samples have been selected as types of the produce of the different districts, in each of which the wines vary. The wines of Barsac are said to be the strongest of all the wines of the Gironde, which is borne out by the strength of No. 54, viz., 20·2, which, I believe, may be accepted as the utmost limit of the wines of this part of France.
53	Grâves - - - -		1858	17·1	
54	Barsac - - - -		1858	20·2	
55	St. Emilion - - -		1857	16·0	
56	Roussillon - - -	M. Durand, proprietor -	1853	27·9	Nos. 56 and 57 are samples of the wine grown in the department of the Eastern Pyrenees, the most southern district of France. The climate and soil being peculiarly adapted for the growth of the vine and the ripening of the fruit the wine produced in this department is reputed to be the strongest of all French wines, which is borne out by the strength shown. The samples were obtained from M. Durand, Deputé, the largest proprietor, who selected the year 1853 as having produced the best and strongest wine. He has also certified that the wine is in the natural condition, and without any addition of spirit, but these wines, though naturally strong, are generally fortified, both for consumption in France, and for exportation.
57	Roussillon - - -	M. Durand, proprietor -	1853	27·9	
58	Cabors, Laponjade, Caillac	M. Laulainé, proprietor -	1858	17·1	This is a sample of the wine grown in the department of the Lot, a district in the south of France, not far from Bordeaux.

(signed) *R. A. Ogilvie.*

Supplementary Report of Mr. *Ogilvie.*

Honourable Sirs,

Since giving in my former reports on the wines of France, I have received a case of samples forwarded by Messrs. Nathaniel Johnston and Sons, one of the largest and most respectable houses in the wine trade at Bordeaux.

These wines, I am assured, are all pure, without any addition of spirit to that naturally formed by fermentation. They have been carefully selected, and obtained direct from the different estates on which they were produced, with a view to represent the varieties of wine grown in the Bordelais, and also the difference of the wine produced on the same estate in various years. Of each kind of wine there are samples of the vintages of the years 1858, 1859, and 1860. The year 1858 was an exceedingly good year, both as regards the quality and quantity of wine, and the vintage of that year was considered first-rate in every respect; 1859 produced only average qualities, and 1860 was a very bad year, yielding poor and weak wine.

These wines have been tested in the laboratory of this department, giving the following results, viz.:—

Description of Wine.	1858.	1859.	1860.
	Per Cent. of Proof Spirit.	*Per Cent. of Proof Spirit.*	*Per Cent. of Proof Spirit.*
Château Lafitte	16·5	17·7	14·8
Langoa	17·7	17·7	16·0
Palmer	17·1	17·7	16·0
St. Estephe, supérior	17·7	18·3	13·7
Medoc-paysan	17·7	18·3	14·8
Grâves	17·7	18·3	14·2
St. Emilion, supérior	18·9	18·9	16·0
St. Emilion, bourgeois	16·5	15·4	16·0
Blaye, bourgeois	18·3	17·1	14·8
Blaye, paysan	17·1	17·1	14·8
Latour, blanche	23·9	26·5	20·8

From these results it will be seen that the wines which are commercially the finest and most valuable, are not always the most alcoholic.

The first five of these wines are produced in the district to the north of Bordeaux, between the Gironde river and the Atlantic Ocean, known as the "Medoc." The finer of these Medoc wines, of which there are from 60 to 65 sorts, are usually divided into five classes; but there are also many sorts not included in such classes, usually denominated "Bourgeois," which are, nevertheless, of very good quality.

The first sample, Lafitte, produced on the estate of that name situated in the commune of Pauillac, and producing annually from 120 to 150 tonneaux of 200 gallons each, or from 24,000 to 30,000 gallons, stands at the head of the first class, being considered the finest wine of the district. The second sample, Langoa, is a third-class wine grown in the commune of St. Julien, on the estate of Mr. Barton, producing from 100 to 120 tonneaux, or 20,000 to 24,000 gallons annually. The third sample, Palmer, is of the same class, produced in the commune of Cantenac, on the estate of M. Emile Pereire, producing from 50 to 60 tonneaux, or 10,000 to 12,000 gallons annually.

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The

France and Switzerland.

French Wines.

The two next samples are grown in the commune St. Estephe, on estates not classed, and are of quality inferior to the three first, from which they differ in most of their characteristics. The wines of St. Estephe have good flavour and bouquet, and keep well; they are reckoned wholesome, and are recommended as good tonics. The sixth sample, Grâves, is one of the superior wines grown on the plains of gravel and sand left by the receding waters of the Garonne and Gironde, situated on the left or western side of those rivers, extending almost continuously from Castillon-sur-Gironde to Langon-sur-Garonne.

The two next wines are the produce of the St. Emilion district, so called from the town of that name, better known in ancient times, situated to the east of Bordeaux, in the arrondissement of Libourne. The St. Emilion wines have been renowned from a very early period, and were well known and highly esteemed in England as far back as the 14th century. The first of these two wines, "Bourgeois," is grown on the hills; and the second "Paysan," among the low grounds. The Blaye "Bourgeois" is the first quality wine grown in the Blaye district, on the right or eastern bank of the river Gironde, and the "Paysan" is a commoner sort from the same locality, grown by the peasants. This district is one of the richest and most productive of the Gironde; it contains 72,347 hectares, or about 181,000 acres, of which 10,460 hectares, or 26,000 acres, are devoted to the cultivation of the vine, producing usually about 20,000 tonneaux, or 4,000,000 gallons; but during the last year, 1861, only between 3,500 and 4,000 tonneaux, or between 700,000 and 800,000 gallons, were produced.

The last kind of wine represented by these samples is the white wine produced higher up the river Garonne, about 20 miles to the south-east of Bordeaux. This district produces the well-known wines of Sauterne, Barsac, Preignac, and Bommes; the sample is from the estate of Madame Focke, La Tour Blanche, in the last-named commune, which produces about 50 tonneaux, or 10,000 gallons, annually. This wine is, like all the others of these districts, very strong; this is partly owing to the nature of the grape, which is naturally sweet, but more especially to the fact that the grapes are left longer on the vine, and carefully picked at various times, the very ripe ones only being gathered at each picking.

It will be seen that the strongest sample of this wine is of the vintage of 1859, which is also the sweetest and best in quality, differing in this respect from the other sorts of the wines of the Bordelais, represented by these 33 samples. It is frequently the case, that the years in which the vintage is of the finest qualities in the Medoc, are by no means celebrated for the fineness of the quality of the Sauternes and neighbouring wines.

The strength of these wines being within the range of those I obtained myself in France, they will be of little value in relation to the question of the greatest strength of natural wines; but they are interesting, as showing the difference which exists in wines produced in the same plants, soil, and spot, but under the variations of weather occurring in different years.

I have, &c.

6 January 1862. (signed) *R. A. Ogilvie.*

REPORT on the WINES of the *Rhine Provinces*, *Bavaria*, *Hungary*, and *Austria*, by Mr. *J. W. Douglas*, Assistant Surveyor, Her Majesty's Customs, London.

Honourable Sirs,

Rhine Provinces, Bavaria, Hungary, and Austria.

IN obedience to the Board's Order of the 30th September last, I proceeded, on the 1st October, direct to Frankfort-on-the-Main, and delivered to the British Consul there the letter with which I had been furnished. The Consul, Mr. Koch, a banker and wine-merchant of the first class, was much interested in the subject of my mission, and volunteered to go with me in my researches in the Rhine Provinces. From his long experience in all matters connected with wine, his position in business and as consul, and from his being well known to all the chief wine growers, Mr. Koch was the best person to advise me, and accordingly I was very willing to be guided by him and to accept his assistance. He informed me that the wines of the Moselle, and the left bank of the Rhine, were not generally strong enough to make it worth my while to go in quest of them, and that I should find a large quantity of the best Rhine wines on the right bank, more particularly about Rudesheim.

Accordingly, accompanied by Mr. Koch, I spent two days in visiting this district for a distance of 50 miles, tasting a great number of wines in various cellars. In all the cellars, large or small, samples were freely drawn in glasses, but it is the custom not to allow any samples to be removed from the premises, doubtless for the reason that each of the numerous proprietors fears that intending purchasers might then better compare the qualities of similar wines: a process these wine growers do not like; hence, although I explained that I had no mercantile object in view, it was a difficult matter to get sample bottles or casks. The wine is kept in large casks of 120 gallons, and it is not easy to buy one of them, as it is the practice for the growers to sell to the merchants only in large quantity; but, as a special favour to Mr. Koch, three samples were eventually obtained from Herr Johann Hey (Nos. 1, 2, 3). It is possible that some of the wines I saw, but could not get, were a shade stronger, but those I obtained may be taken as very well representing the strongest of the Rhine wines of the better quality. Of the reputed superior kinds, as they were not otherwise to be procured, Mr. Koch, at my request, supplied from his own large stock a bottle of two of such kinds (Nos. 4 and 5), which he assured me were perfectly genuine.

The famous "Johannisberg" may be obtained as a favour at 1 *l.* a bottle, yet although it may possess considerable strength, it is very scarce, is considered to be only an exception and curiosity, and can never be an article of general use, and as the samples sent, I was assured, will well represent the strongest of the Rhine wines, I did not deem it necessary to get any of the "Johannisberg."

In the manufacture of the wines great care is taken not only to keep each variety of grapes separate, but also to put together only the grapes from one portion of a vineyard, so that each cask of wine is the produce of a special area. The price of the casks of the same vintage and from the same vineyard varies greatly, sometimes, doubtless, in accordance with the quality, but often only in consequence of the fancy or caprice of the maker.

The *growers* pride themselves upon the purity of their wines, and from all the inquiries I made I believe that they do not practice mixing or adulteration. I heard, however, that in bad seasons poor wines have had sugar and spirit added to the "must" to supply the amount of sweetness and strength naturally present in good years, but as such additions entirely destroy the delicacy and bouquet to which Rhine wines owe their chief characteristics, there is no temptation generally to add extrinsic matters.

On the other hand the *dealers* buy up the poorer wines, and by mixing them with others of better quality, and by the addition of spirit and chemical matter seek to give to the wine the character of the better kinds, and thus increase their profits. Bingen, I was told, is a town notorious for such spurious manufacture.

It is quite an exceptional thing to have two good seasons consecutively, but the

Rhine Provinces, Bavaria, Hungary, and Austria.

the years 1857, 1858, and 1859 were all good, and the growers have therefore large stocks on hand, yet they are not anxious to sell, except at their own price. The wines are not in fine condition until they are three or four years old; the flavour and bouquet not being developed in less time in the casks in which the wine is invariably kept, and until the wine is of this age it will not bear transport.

Anterior to the late French treaty there was not much wine in cask exported to England, although it was so shipped to the United States of America, where there is a large demand for Rhenish wine of the lower qualities among the Germans settled there, to whom it is sold on draught; but since the treaty there have been considerable shipments in the cask to England, and it is believed that this kind of trade must be still further developed, so that the better sorts of wine may be bottled in England, and therefore, by the saving in freight and other expenses, be sold much cheaper than at present. But to such exportation the sparkling wines must naturally be an exception, in consequence of the necessity of bottling them when new, and when new they will not bear carriage in cask.

At Eltville I saw, in the cellars of Müller Brothers, the way in which still wine is converted into sparkling wine: The wine, bottled when young, is *dégorgé;* that is, the cork is withdrawn, the sediment, which has accumulated in the neck of the bottle by its having been kept turned down, is dexterously removed, and the bottle is immediately filled up with about a gill of syrup (the composition of which is a secret) and about one-fourth of a wine-glassful of brandy; then the cork is replaced and wired, and the operation is complete. I thought it right to send samples of this wine; but being unable to procure them at the time, Mr. Koch was good enough to get them afterwards (Nos. 6, 7).

I cannot close this part of my report without stating the great obligations I am under to Mr. Koch, who, at great personal inconvenience, gave up two days to accompany me to Rudesheim, and in every way did the utmost to facilitate the objects I had in view; which, indeed, without his assistance, I should not have been able to accomplish.

Mr. Koch informed me that in Bavaria there are potent wines, and advised me to visit the cellars of the King of Bavaria at Würzburg, giving me at the same time a letter to Herr Oppmann, the superintendent. I accordingly visited these vast cellars under the palace at Würzburg, and selected from the immense stock the best of the wines for samples; these I had some difficulty in getting, but at last succeeded. The years 1857, 1858, and 1859 having all been good, the quantity of wine in stock is very great, and I was assured that it is all pure, and of fine merchantable quality. The samples are numbered 8 to 11.

From Würzburg I proceeded direct to Vienna, where I expected to find a letter from Mr. Dunlop, of Trieste, to whom I had written stating the object of my visit to Austria; but as I found no letter *poste restante,* I waited on the Vice-consul, Mr. Weikersheim, and learned that Mr. Dunlop had written to him, informing him that I was about to proceed into Hungary, and begging that he would give me all the advice and assistance in his power. Mr. Weikersheim said the best thing I could do was to consult Mr. Sellers at Pesth, a gentleman through whom Mr. Dunlop had acquired most of the information about Hungarian wines embodied in his Reports to the Government; and he gave me a letter of introduction to Mr. Sellers.

Arrived at Pesth, I found that Mr. Sellers, an Englishman, resident in Hungary for four years, and engaged in commercial pursuits, more especially in connexion with wine, was well informed in all matters relating to Hungarian wine; was intimately acquainted with the manners and customs of the people, having travelled much among them; and was well known to the leading men in Hungary. Being just now disengaged, he offered to accompany me in my explorations, I, of course, paying his expenses. This offer I was very glad to accept; and now that my labours are finished, I am satisfied I could not have made a better arrangement; for the majority of the people out of Pesth do not speak German, and the Hungarian language has no affinity to the German; so that it would have been extremely difficult, if not impossible, for me to have made myself intelligible without Mr. Sellers' assistance.

Mr. Sellers advised me in the first place to see Herr Korizmics, a private gentleman of property, editor of the "Gazdusagi Lapok," (the agricultural gazette,) and chairman of the committee appointed to select Hungarian produce

duce for the London Exhibition in 1862, where Hungarian wine will be largely represented. This gentleman is reputed to be the best informed man on agricultural matters in all Hungary, is known and respected everywhere, and, Mr. Sellers told me, was likely to forward the purpose of my visit. Accordingly I called upon Herr Korizmics, at his chateau at Felény, about nine miles from Pesth, where he received me with great kindness; and having explained to him my object, he expressed great interest therein, informed me that the varieties of Hungarian wine were endless, that I should find the strongest at Buda, Szexard, Arad, and Veszprim, and that he would give me letters to some of the first growers at these places.

The places indicated lie wide apart and in different directions out of Pesth, which I had to make my head-quarters.

First, I went to Buda, on the side of the Danube opposite to Pesth, celebrated for its strong wines. Here I saw many sorts; and in the cellars of Professor Dr. Sauer I took samples of two of the strongest (Nos. 12, 13).

Next, I went to Szexard, 140 miles by steamer on the Danube, to Tolna, and then nine miles in one of the springless country carts over tracks in the sand. The Baron Augusz, to whom I had a letter, lives in a large house, in good style, and is the first man in the place. He devoted a day to show me his vineyards and cellars, and also those of some of his neighbours, and gave me samples of three of his finest wines (Nos. 14, 15, 16).

The next place I visited was Arad, 160 miles by rail, having a letter to Herr Burgomeister Torök, who introduced me to several other wine-growers; and I visited their cellars, and selected the strongest wines for samples, three from the stock of Antoinette Hollaki, and one from that of the Rev. György Eustache Sujänsky, the chief pastor in Arad, in whose cellars are only the finest wines. All the samples were freely given, but the bottles are smaller than I could have wished (Nos. 17, 18, 19, 20).

My last route was to Veszprim, *viâ* rail to Stuklweissenburg, 50 miles, and then by carriage, 30 miles. My letter was addressed to the Bishop of Veszprim, but he was absent on a visit of some days to the vineyards; in his absence, his secretary, although he did not open the letter, yet upon learning its purport and that it was from Herr Korizmics, very handsomely showed me the vast stock of wine in the cellars, and gave me two large bottles of the best; at the same time I was told there was no stronger wine in the district (No. 21).

I was desirous to send samples of the celebrated "Tokay" wine, but Herr Korizmics told me that it was in such repute that it was imitated in many places by the fictitious manufacture of inferior wines; that the spurious manufacture was carried on at Tokay itself; and that if I visited the place (more than 200 miles distant), I might very possibly spend a week there and still be deceived by spurious specimens; and that he would recommend me to a friend of his in Pesth, a highly honourable man, for samples of the genuine wine; or failing to see him, he would advise that I should trust to Mr. Sellers to get them from some other undoubted source. Mr. Torök, the person recommended, was not in Pesth, so Mr. Sellers had the goodness to get two bottles of "Tokay" from the cellars of the "Casino," the Noblemen's club in Pesth. This wine had been received direct from the grower, perfectly pure, and was furnished to Mr. Sellers only as a favour (No. 22).

In taking samples as of the strongest wines to be procured, I have not relied solely upon my own judgment, but have been aided by that of the growers and by the general repute of the wines. When it is considered that there are in Hungary 700 or 800 different varieties of wine—of which I saw only a selection—that the growers themselves have no other guide in judging of the strength than their own taste or opinion, it may well happen that there are yet stronger natural wines than any that came under my notice, but I was assured that this was not probable to a greater extent than one per cent.

It appears to be certain that the Hungarian wine growers do not adulterate their wines; indeed, they are so generally good that they would certainly be deteriorated if alcohol were added. That pure Hungarian wine, when properly made, will keep well I had evidence at Szexard, where the Baron Augusz showed me wine 20 years old which had preserved its character and colour, and at Buda I was informed that unfortified wine had been sent to America, and returned without any deterioration. I believe I may say with the utmost truth, that *pure* Hungarian wine, as an article of commerce, is as yet unknown in

Rhine Provinces, Bavaria, Hungary, and Austria.

England, all that has hitherto come having passed through the hands of dealers, who mix the wine, water, and otherwise adulterate it, to suit, as they say, the English taste, but in reality to enhance their own profits; and this treatment has obtained for Hungarian wines a character they do not deserve. While possessing a great resemblance to the wines of Burgundy and the Rhine, the better wines of Hungary have greater body and strength, and would be more likely to suit the English taste; but in order that they may succeed in England, they must be imported direct from the growers. Such wines, it is computed, could be sold in bond in London for 4 *s.* a gallon.

The quantity of wine now on hand is enormous, the seasons of the three successive years, 1857, 1858, and 1859 having been all fine. The average yearly produce of wine has been estimated at 400,000,000 gallons, of which at least one-third is available for export; and upon demand the production could be almost indefinitely increased.

At the present time, the produce is greater than the demand: and I am assured that when good seasons follow one another wine is a complete drug, is distilled, made into vinegar, or even thrown away for the sake of the casks for the new wine; and in some places the growth of corn has supplanted that of the vine, as the produce pays better. This year the vintage is not abundant, but the quality of the wine is better than in any year since 1834.

Hitherto wine has not been produced in Hungary with a view to exportation; the method of cultivating the vine is capable of improvement, and the manufacture and manipulation of the wine are very defective. This is the case, speaking generally; though there are men who have adopted better modes of cultivating their vines, and of making and managing their wine. Yet with all these disadvantages there is probably no country in which so great a proportion of good wine is made; and if an export trade with England were once established, there would doubtless be a general improvement in the quality of the wines, as there would be so great a stimulus to the adoption of improved processes in the manufacture.

There are, however, other impediments. The Hungarians, primitive, simple, and poor, are satisfied with what they can get with little trouble, and content to live from hand to mouth. There is no industrial or commercial organization; there exists a perfect ignorance of the ways of commerce, and an indifference to the acquisition of a knowledge of them. Thus, for instance, the system of bills and credit being wholly unknown, a purchaser of any goods must pay for them before they leave the premises. The larger growers do not care, and the smaller ones are not able, to keep their wine for three or four years till it is in proper condition, but sell it at once. Worse than this, I was told that a great proportion of the smaller growers are in the hands of the Jews, who advance money on the produce of the land months before it is ready, not only on wine, but also on corn, wool, &c.

The cost of carriage to a distant port and country would doubtless be a serious item against the sale of Hungarian wines, but this might be compensated by the original low price, or mitigated by a contract agreement with the railway and steam-boat companies, as is at this time in operation for the carriage of corn destined for France.

When I was at Vienna, Mr. Weikersheim, the Vice-consul, thought it desirable that I should have some representations of the wines of Austria Proper, which, he stated, have considerable strength, and he afterwards procured for me five samples (Nos. 23 to 27).

It now only remains for me to say, that I have spared no time or exertion to attain the object entrusted to me, and that I beg leave to express a hope that I may have secured the Board's approbation of the manner in which I have performed my duty.

I have, &c.
(signed) *J. W. Douglas.*

Custom House,
5 November 1861.

PARTICULARS of the Samples of WINE obtained in the *Rhine Provinces, Bavaria, Hungary,* and *Austria,* by Mr. *Douglas.*

Number of Sample.	Name of the Wine.	Obtained from	Year of Vintage.	Strength.	OBSERVATIONS.
	RHENISH PROVINCES:				
1	Rudesheimer - - -	Herr Johann Hey, Rudesheim, the grower.	1857	20·2	These samples, representing the best of the medium qualities of the Rhine wines, were drawn from the large casks in which wine, in this district, is invariably kept. I was assured of their perfect purity, and that it is not the practice for growers to adulterate their wines; as any such treatment inevitably destroys the delicacy of flavour and bouquet to which Rhenish wines owe their repute. The growers pride themselves upon the purity of their wines, and take great pains to sort the grapes, and to keep the produce of particular portions of the vineyard separate, so that each cask contains the produce of a distinct area. But at Bingen and other places, the dealers mix and adulterate the poorer wines with sugar, spirit, and chemicals, in order to simulate wines of a better grade.
2	Rudesheimer - - -	Herr Johann Hey, Rudesheim, the grower.	1857	22·0	
3	Rudesheimer - - -	Herr Johann Hey, Rudesheim, the grower.	1858	22·7	
4	Forster Traminer - -	Mr. Koch, Frankfort-on-the-Main.	1857	21·4	These samples represent the better and stronger class of Rhine wines, and as they were not otherwise to be procured, Mr. Koch, the British Consul, had the goodness to supply them from his own stock, into which they were received direct from the growers, and they were warranted to be perfectly natural wines.
5	Marcobrunno - -	Mr. Koch, Frankfort-on-the-Main.	1857	22·0	
6	Sparkling Hock (natural)	Müller Brothers, Eltville, the growers.	–	21·4	These two were obtained as samples; the one, of a wine in its natural state; the other, of the same kind of wine after it had been disgorged. The wine is bottled when new; the sediment which accumulates in the neck of the inverted bottle is removed by "disgorging," and its place is supplied with about a gill of syrup and a very small portion of brandy, an operation I saw performed.
7	Sparkling Hock (spirit added).	Müller Brothers, Eltville, the growers.	–	22·0	
	BAVARIAN WINES:				
8	Schalksberger - -	King of Bavaria's cellars; Wurzburg.	1857	20·8	These samples represent the best of the Bavarian "Stein" wines, and were recommended to me in the King of Bavaria's cellars as the strongest of the district, and at the same time perfectly natural, and I was assured that the wines here are not adulterated.
9	Stein Reisslinger - -	King of Bavaria's cellars; Wurzburg.	1857	21·4	
10	Hörsteiner Reisslinger -	King of Bavaria's cellars; Wurzburg.	1857	22·0	
11	Leister Reisslinger - -	King of Bavaria's cellars; Wurzburg.	1857	21·4	
	HUNGARIAN WINES:				
12	Buda wine - - -	Professor Sauer, Buda, the grower.	1857	19·6	These samples, I was assured, represent the strongest of the Buda wines, and were selected as the strongest in the grower's stock. They were drawn from the cask, and, there is no doubt, are perfectly pure, as was declared to me.
13	Buda wine - - -	Professor Sauer, Buda, the grower.	1852	20·2	
14	Szexard wine - - -	Baron Augusz, Szexard -	1841	20·8	These samples, representing the best and strongest of the wines of the celebrated Szexard district, were declared by the grower to be perfectly natural, and were freely given, the proprietor expressing much interest in the experiments to be made with them.
15	Szexard wine - - -	Baron Augusz, Szexard -	1851	20·2	
16	Szexard wine - - -	Baron Augusz, the chief grower at Szexard.	1856	20·2	
17	Menés - - - -	Antoinette Hollaki, Arad	1856	28·6	These samples, which were freely given, I was informed would well represent the strongest of the Arad wines, and all of them, drawn from the cask, I was assured, are perfectly natural wines.
18	Menés - - - -	Antoinette Hollaki, Arad	1848	25·2	
19	Menés - - - -	Antoinette Hollaki, Arad	1857	25·2	
20	Paulis - - - -	Rev. György E. Sujansky, Arad, the growers.	1855	23·3	
21	Somlgo - - - -	The Bishop of Veszprim, the grower.	1857	24·6	This was selected as the finest and strongest wine in the cellars of the Bishop of Veszprim, where there is an immense stock; and the samples were drawn from an enormous cask, and freely given.
22	Tokay - - - -	The "Casino" Club-house, Pesth.	1811	21·4	This, the most celebrated wine of Hungary, is imitated by the manufacture in various ways of inferior wines, so that not only in other places, but even in Tokay itself and the surrounding district, a spurious wine is commonly given for the genuine. I was therefore advised to procure a sample from an undoubted source, and was assured that the sample I obtained was received from one of the first growers at Tokay, and may be relied upon as perfectly genuine. With the exception of the "Aüsbrüchs" (of which "Tokay" is an example), which have a peculiar character, dependent upon a particular method of manufacture, it appears to be certain that the Hungarian wines are not adulterated by the *growers*; but the *dealers* in the towns, particularly at Pesth and Presburg, buy up large quantities, and mix water, and otherwise adulterate them to enhance their own profits, and there is reason to believe that it is almost only wine of this kind that has hitherto found its way to England, and that the pure wines of Hungary are really unknown to us. If imported direct from the growers, the better class of wines could not fail of a large sale in England, for it has been calculated that they could be sold in bond in London at 4*s.* a gallon.
	AUSTRIAN WINES:				
23	Kerschbacher - - -	Mr. Weikersheim, British Vice-consul, Vienna.	1834	17·1	Mr. Weikersheim, the British Vice-consul at Vienna, thought it desirable that I should have some of the natural wines of Austria (proper), which, he stated, possessed considerable strength, and he procured for me these samples, which he believes to be perfectly genuine.
24	Luttenberger - - -	Mr. Weikersheim, British Vice-consul, Vienna.	1822	17·1	
25	Portoldsdorfer - -	Mr. Weikersheim, British Vice-consul, Vienna.	1855	22·7	
26	Gumpoldskirchner - -	Mr. Weikersheim, British Vice-consul, Vienna.	1859	23·3	
27	Gumpoldskirchner - -	Mr. Weikersheim, British Vice-consul, Vienna, who obtained them from the growers.	1857	20·2	

REPORT on the WINES of *Spain* and *Portugal*, by Mr. *Charles Bernard*, Assistant Surveyor, Her Majesty's Customs, London.

Honourable Sirs,

Spain and Portugal.

IN obedience to your Honors' instructions, I proceeded, on the 3d of October, to the wine districts of Spain and Portugal, my object being to procure, primarily, the strongest natural wines of each country in a pure and unsophisticated condition, and, secondarily, such wines as had been strengthened by admixture with other and stronger varieties, or directly or indirectly by the addition of spirit, entirely with a view to the preservation of the wine, and not for the mere purpose of increasing its strength or adding to its value in the market; and I now beg to submit to the Board the accompanying list of samples which I obtained during my tour, and forwarded to London for analysis; together with a few remarks based upon such general information as I could obtain in a necessarily brief investigation over so extensive an area.

The large shippers and vineyard proprietors of Spain and Portugal are, and have been for a long period of time, manufacturers rather than simply producers of wine. The practice said to be followed in other countries, of merely watching and aiding nature in the development of fermentation, has here superadded to it a system of mixing and fortifying that tends to produce an intoxicating rather than a purely exhilarating beverage.

It is not my province to enter into the question of the causes which have led to this result, and which are doubtless to a great extent dependent on the system of legislation in past periods of our own country. It will suffice to my present purpose that such results exist, and hence a great difficulty presented itself in the way of my fulfilling the first portion of my instructions as regarded the obtaining of pure and natural wines of a high degree of strength.

An opinion seems generally prevalent among the growers and shippers that natural wines will not maintain themselves sound unless assisted by the addition of distilled spirit. Even to some extent where it is not the practice to add spirit to the "must," as in the case of the Montillã, Val-de-penãs, &c., it is usual, and considered necessary, before the wines are made up for exportation, to add spirit to a greater or less amount. I am not prepared to endorse this statement fully. Opinions are often the result of prejudice in favour of an old established practice; and in countries of so conservative a character as those I have just visited, such a feeling would most probably prevail. It is certain that among the finest wines of which I obtained samples in Spain, as being pure natural growths,—such, for instance, as those of Montillã (samples Nos. 19 to 21), averaging 31·7 per cent.; also samples Nos. 1 to 5, 10, 12, and 13, from the districts of St. Lucar, Xeres, and St. Mary's, averaging together 28·8 per cent. of spirit,—there are qualities of body, soundness, and spirit sufficient, apparently, with ordinary care, to preserve the wines in any climate, and even during a voyage by sea, such wines being not unfrequently imported, though not to a large extent; and the sample obtained from Mr. Harris, of Oporto (No. 53, in my list), of port wine made in accordance with the method of Mr. Forrester, in the year 1834, without added spirit, and which is still sound and in good condition, although not a first-class wine originally, is a proof of the natural durability of such wines. Ports and Sherries, when highly fortified, meet a more ready and extended sale in the United Kingdom than the finer and less manufactured article, but the durability of the latter is, I think, beyond dispute.

My first care, on arriving in Spain, was to make such inquiries as would enable me to visit, with the least loss of time, the districts which produced the strongest and best description of wine. The information I obtained pointed entirely to the southern and eastern districts. Commencing from Port St. Mary's, I visited St. Lucar and Xeres, which places form the three angles of a triangular district included between them, supposed to produce the strongest wines in Spain. This, however, is not fully borne out by the result of the test in London, as the wines from Montillã, which was the next district visited, have been found to be stronger than those of St. Lucar and Xeres, and only just below

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below those of St. Mary's, the averages of the natural samples of each being—

St. Lucar - -	27·0 per cent.	St. Mary's - -	32·3 per cent.
Xeres - - -	27·2 „	Montillã - -	31·7 „

I also obtained samples in which spirit had more or less been mixed. Those of the two first districts, slightly fortified, average 30·7 per cent. Those of the third 29·4 per cent., except two samples more highly fortified for the English buyer, averaging 35·7 per cent.

It may be as well here to give a *resumé* of the general practice in the Xeres districts of preparing wines.

No spirit is added to the "must" during the process of manufacture or pressing the grape at the vineyard, unless it is intended to be made "sweet wine," and then six arobas (equal to about 21 gallons of spirit, about 60 per cent. over proof) are added in order to prevent fermentation, and to retain its sweetness; and when this sweet wine is drawn off the lees, about six months after it is made, three or four gallons more spirit are added, making in all between 24 and 25 gallons of spirit to the butt. This sweet wine is not usually exported, but is used for the preparation of other wines intended for the English market, and is added to other wines to give body, flavour, and strength, in such proportion as is deemed necessary according to the style and taste required.

The wines intended for white dry wines, and eventually to be made up into what is known in England as "Sherry," have about two gallons of spirit added to the butt when drawn off the lees in the month of March or April following the vintage, and during the rearing of them further small quantities, from time to time, as required. Those wines selected for Vino fino, Amontillado, and Manzanillã, in lieu of having spirit added to them, are thrown on to Soleras; or fine old mother wines which, by age, care and attention, have acquired a body and character, and which are used in mixing with other wines to improve them. The stocks of Soleras are always kept up in the following manner:

Say 20 butts, 1841; half drawn off for use.
20 butts, 1842; half thrown into 1841.
20 butts, 1843; half thrown into 1842.

And so on from year to year, the younger wine being thrown on to the wine of the year previous.

Notwithstanding the quantity of spirit (two gallons) used in rearing wine (not Amontillado, Vino fino, and Manzanillã), it is usual, when it is made up into Sherry for England, to add at the time of fining it, from two to four gallons more spirit, according to the quality and age of the wine. There is, however, no standard Sherry made up, and no regulated quantity of spirit used, as that depends both on the character desired by the purchaser, and (a most important consideration) on what the wine itself requires.

Shippers and rearers of wine will not admit that a drop more spirit is used than is absolutely necessary for the preservation of the wine. Of this, however, as I have above hinted, another opinion may be entertained.

A butt of Sherry for England is made up in 40 jars in various proportions; thus, for example:—

1 Jar, spirit about 60 over proof.
8 Jars, of the sweet wine or dulce.
7 Jars, soleras or mother wine.
10 Jars, dry wine, 1854.
14 Jars, dry wine, 1859.

40

The Amontillado is entirely a chance wine, that is, it cannot be made as a matter of course, or reckoned upon with any certainty, inasmuch as out of 50 butts

Spain and Portugal.

butts of wine made at the same vineyard, under the same circumstances and with the same kind of grapes, probably only two or three will turn out to be wine of this character. No reason, however, can be assigned for its partaking of the peculiar flavour, &c. of Montillã wine, from which it derives its name.

When the wines are classified in the spring, those which from their taste and style are likely to turn out Amontillado and Vino fino are marked in a certain manner, put aside, and are carefully watched and reared, but it does not unfrequently happen that after the selection they fall off and become sick and out of order, when they are treated in the same way as other ordinary white wines, and spirit is added in the proportion deemed requisite to secure them from spoiling; should the wine, however, not recover under this treatment, and acetic fermentation supervene, it is then sent for distillation into brandy.

The wines of the Val-de-penãs were next procured; and on distillation, in this country, the two samples of sweet wine (white), which I was assurred were in their natural condition, yielded respectively 22·0 and 31·3 per cent. of proof spirit. The latter strength is so high in comparison with the former, and so unusual in a sweet wine which has not been treated with spirit, that I cannot but think there must have been some error in classing them together as pure natural wines. I have, however, no absolute means of testing the correctness of my information. The red wine, which is the ordinary wine of the district (sample, No. 24), and which gives 27·9 per cent., has every character of a natural wine, and though its qualities may not be first rate, it may still be suitable to the taste of many who are content with moderate excellence.

At Valencia I obtained samples of three kinds of wine; the first two were red dry wines, vintage 1860, one yielding 28·6 per cent., the other 25·9 per cent.; these were stated to be quite natural, but if required for exportation, five gallons of spirit per pipe would be added to preserve the wine on the voyage. The third sample was a red sweet wine, which had been prepared to be forwarded to England, by 7½ gallons of spirit per butt being added: the resulting strength, 28·6 per cent., shows it originally to have been but moderately strong, as might have been expected in a sweet wine. A sample of the spirit used for fortifying these wines gives a strength of 62·2 per cent. over proof. The quantity of red dry wine made in this province considerably exceeds that of the sweet sorts. As the wines of former years had been sold for shipment or consumed, I was limited in the choice of samples.

Benicarlo came next in my route. There I only obtained two samples; the first a natural wine, of the present vintage; the second of last year's growth, which had been fortified with five gallons of spirit (55 per cent. over proof) to the pipe.

It is not the practice in this district to add any spirit at the time of making the wines; but in the spring of the year following, when the wine, feeling the increasing heat, sets up a secondary fermentation, it is considered to be absolutely necessary to add spirit, to prevent the alcoholic fermentation from passing into the acetous. The wine of Benicarlo intended for exportation is fortified to the extent of five gallons per pipe, though 2½ gallons would be considered sufficient to preserve it for home use. Here, again, but little stock is kept on hand, each year's produce being generally sold for exportation, or consumed by the time the new wine is made; and it was impossible to procure samples of natural wine of former vintages.

The wines of Valencia, Benicarlo, and Alicante, being rich in colour, are made up to similate Port wine, and the casks are prepared to resemble Port pipes as to size and appearance. A very large proportion of these wines finds its way to France, for the purpose of blending with other wines; no doubt having a large share in the composition of the imitation Ports shipped to this country from Marseilles.

I obtained at Alicante two samples of wines, one from the mountain sides, the other from the vineyards of the plains, both of them the growth of 1860. If these wines are sufficiently sound to pass the succeeding spring with no dangerous fermentation, they may be kept without spirit for some time; but it generally happens that the warm weather so far threatens their safety as to render the addition of spirit a measure of security. If intended for exportation, from

from five to seven gallons of Catalan spirit, 63° or 64° over proof, are added to each butt, with a view, as stated, to preserve the wine.

I was informed by Colonel Barrie, British Consul at Alicante, that a friend of his had recently shipped a large quantity of wine with only 3 or 3 ½ gallons of spirit per pipe, added at the time of exportation (no spirit having previously been used), and on arrival in England the whole was found to be completely spoiled.

At Malaga I obtained some samples of wines from the stores of the sons of Don Manuel Augustin Heredin, who are the most extensive growers, proprietors, and exporters in Malaga. The first, No. 32, was a dry wine, vintage 1858; the next, No. 33, a sweet wine, vintage 1857; each of these had been treated, as I was informed, in the usual manner, by the addition of nine gallons of strong spirit, between the first and second fermentations, which quantity the producers think really necessary to preserve the wine, whether to be exported or consumed at home. The usual practice of making up wines *specially* for the English market does not appear to prevail here, no difference whatever being made. In regard to sample No. 34, I must confess I feel a special difficulty; for whilst Nos. 32 and 33, which are heavily fortified wines, show respectively a strength of 37·5 per cent. and 29·9 per cent., amounts fairly to be expected, No. 34, which was given to me as a peculiar and exceptional wine, having been made without the addition of spirit at any period of its existence, is yet of the same strength as No. 32, viz. 37·5 per cent.: I learned, however, that it was made in the year 1847, with great care and attention: the vines from which it was produced having been carefully and extensively pruned, being reduced to one or two branches; thus concentrating the vigour of each tree in a few rich bunches of grapes. That such a course of proceeding must have added much to the strength of the wine, there can be no question; but that a strength equal to that of a highly fortified wine of the same district should have been attained seems, to say the least, very surprising! In this difficulty, however, I can only leave the matter as it stands.

At Lisbon I obtained samples of various wines; but the amount of fortification was so excessive, that I thought I should exceed my instructions if I forwarded them; and the natural wines of this year's growth, as yet unfortified, were in such a state of high fermentation as to render it impossible to send them. I therefore turned my attention to the districts of the Alto Douro, as being those in which the strongest and most celebrated wines of Portugal were produced. The samples which I procured from the different vineyards in the district, of the present year's growth, were as yet free from extraneous spirit. They were, however, in a state of fermentation at the time, but sufficiently advanced for me to forward the samples, Nos. 38 to 42, which show an average strength of 23·5 per cent. only. It is, however, to be expected that in the tonel a considerable increase of spirit may be generated. Mr. Fladgate, grower, &c., Oporto, illustrated this to me by the following statement. He tried a sample of wine when drawn from the lagar or press in October 1860, and found it contained nearly 19 per cent. of spirit; in June 1861 the same wine drawn fron the tonel showed 22·8 per cent.

Sample 44, a wine of this year's growth unmixed with spirit, gives a result of 25·9 per cent.; the next sample of the same vintage, with two almudes (about 10 gallons) of spirit added, gives 33·3 per cent. The first, which is a wine of excellent qualities, would not be long allowed to remain without the addition of spirit. It is the invariable practice in the Alto Douro with the best wines to add spirit to the "must," to check fermentation, and insure its retaining its sweetness. Only second-class wines are allowed to remain any time without spirit, and when such is the case, the wine is generally rough and harsh.

The grower exercises a constant supervision over the wines he has made even after they are purchased from him, as they are generally left in his charge until the spring following, when they are removed down the river to the stores of the purchaser, at Villa Nova. Here the wine is again fortified with small doses of spirit, and racked and clarified from time to time.

I understand that the best and strongest natural wines require the greatest amount of extraneous spirit (say 20 per cent.) to keep them in a sound and

 improving

Spain and Portugal.

improving condition. When the wine is deficient in colour, a few canadas of elder berry juice is added per pipe.

Samples Nos. 48 to 52 represent the wines which go under the denomination of Figuera wines, the average strength shown being 23·1 per cent. They are samples of pure natural wines, unfortified as yet, but which will most probably be similarly treated to the rest.

I come now to a sample which possesses more interest in regard to the present question than perhaps any of the others. It is from the stores of Mr. Harris, one of the oldest merchants of Oporto, and was made on the French system, adopted by Mr. Forrester, and I cannot do better than give the words of Mr. Harris in his letter accompanying the samples. He says, "The two bottles of wine sent, have been in my possession upwards of 15 years; they are of the vintage of 1834, and are taken from two lots made at the same time in the French style, and without a drop of brandy: the moment the fermentation was complete, the wine was bottled. The experiment was made to ascertain whether port wine could be so treated as to keep without brandy, and, as we are now in the year 1861, the trial has completely succeeded; but the wine, though made in a good situation, in the Alto Douro, and in a year remarkable for fine wines, was valued in London at about 8 *l.* or 9 *l.* per pipe, being considered excessively harsh and inferior to the common low wines of France. The cost to the maker could not be less than 25 *l.* to 30 *l.* per pipe, so that, in a commercial point of view, the failure could scarcely have been more disastrous."

The result of the experiment, although, in a commercial sense, a failure, is at the same time a proof of the correctness of the theory of the natural durability of the wine unassisted by spirit. Whether such wines may become commercially valuable ultimately, is of course an open question. The national taste of England has changed, and may do so again; indeed the current of opinion is certainly inclining to the more simple and pure wines; and, should it completely come round, it is not improbable the growers of Spain and Portugal may find a more profitable and successful mode of treatment of their wines in order to meet the altered taste of the public. I cannot, however, set my own inexperience in these matters too positively against the general tenor of opinion in Spain and Portugal of those most deeply interested in the success and appreciation of their wines; and the entire sum of my information received while among them, is unmistakeably in favour of the extensive use of distilled spirit to strengthen, purify, and keep the wines they make.

I have, &c.
(signed) *Charles Bernard.*

London, 14 December 1861.

PARTICULARS of Samples of WINE obtained in *Spain* and *Portugal*, by Mr. *Bernard*.

Number of Sample.	Name of the Wine.	Obtained from	Year of Vintage.	Strength.	OBSERVATIONS.
1	Vino fino - - -	M. P. Manjon, grower, St. Lucar.	1857	26·5	These wines, known in England as "sherry," are produced in the south of Spain in the districts around St. Lucar, and were drawn from casks in the podega, or stores of the producer, M. P. Manjon, who assured me that they were perfectly natural, the spirit in them being the product of their natural fermentation. It is generally believed that these wines will increase in strength by age while in cask, and the 1st, 2d and 4th samples for 1857, 1856, and 1849, show an apparent confirmation of the fact; but no positive inference can be drawn in this particular, the wines being of different growths. Within certain limits, and under certain conditions, however, this is doubtless a fact. These wines are rarely shipped to England in their present condition.
2	Vino fino - - -	M. P. Manjon, grower, St. Lucar.	1856	27·2	
3	Vino fino - - -	M. P. Manjon, grower, St. Lucar.	1855	26·5	
4	Vino fino - - -	M. P. Manjon, grower, St. Lucar.	1849	27·9	
5	Vino fino - - -	M. P. Manjon, grower, St. Lucar.	1841	27·2	
6	Sherry - - - -	Don Jose Romero Gill, grower, Xeres.	1859	27·9	Samples, Nos. 6 to 10, represent some of the finest sherries, and were grown in the districts of Xeres, on the estates of Don J. R. Gill, from whom they were obtained. Samples Nos. 6 to 9 have had from 1 to 1½ gallon of spirit (nearly 60 per cent. over-proof) added at the time they were drawn off the lees, it being usual to do so even with fine wines in this district.
7	Sherry - - - -	Don Jose Romero Gill, grower, Xeres.	1860	27·2	
8	Sherry (Amontillado) -	Don Jose Romero Gill, grower, Xeres.	1846	32·6	
9	Sherry (Amontillado) -	Don Jose Romero Gill, grower, Xeres.	1830	35·4	
10	Sherry - - - -	Don Jose Romero Gill, grower, Xeres.	1852	27·2	No. 10 sample is declared to be quite natural, and is an exception to the general practice in rearing wine in Xeres, this wine being made for the private use of the owner.
11	Vino fino - - -	Mr. C. Campbell, Vice-Consul, Port St. Mary's, proprietor.	1852	29·2	The samples Nos. 11 to 18 are also known as sherries; but, with the exception of No. 11, the dates of the vintages could not be correctly ascertained, the wines having been mixed with soleras (older and pure wine stated not to be fortified). No. 11 has had about 1 to 1½ gallon per butt of the usual spirit added at the time of fining, in order to preserve it. Nos. 12 and 13 are pure wines, unmixed with spirit, and unfined. Nos. 14, 15, and 16 have had two gallons of spirit per butt added, in accordance with the general practice, when drawn from the lees, such being considered necessary. Nos. 17 and 18 are sherries of a high quality, specially prepared for the English market by Mr. Campbell. They are mixtures of various superior wines fortified to a small extent in their early stages, and would have no spirit added prior to shipment. The actual percentage of extraneous spirit cannot be stated; but I am assured that it is no more than was thought to be absolutely required for their preservation.
12	Amontillado - - -	Mr. C. Campbell, Vice-Consul, Port St. Mary's, proprietor.	–	29·2	
13	Amontillado - - -	Mr. C. Campbell, Vice-Consul, Port St. Mary's, proprietor.	–	35·4	
14	Vino fino - - -	Don Publio Angulo, grower	–	29·2	
15	Vino fino - - -	Don Jose Rios, grower -	–	30·6	
16	Vino fino - - -	Don Publio Angulo, grower	–	28·6	
17	Sherry - - - -	Mr. C. Campbell, Vice-Consul, Port St. Mary's, proprietor.	–	36·1	
18	Sherry - - - -	Mr. C. Campbell, Vice-Consul, Port St. Mary's, proprietor.	–	35·4	
19	Montillä - - -	Don T. Alvear, grower, Montillä.	1840	33·3	These samples represent the celebrated Montillä wines. They are pure, natural wines, and are highly prized, being considered a first-class wine. Amontillado, I understand, derives its name from its similarity of character to the Montillä wines.
20	Montillä - - -	Don T. Alvear, grower, Montillä.	1845	32·0	
21	Montillä - - -	Don T. Alvear, grower, Montillä.	1855	29·9	
22	Val de penäs - - -	Francesco Cannineda, grower, Val de penäs.	1849	22·0	These samples were declared to be pure, natural wines. The red (No. 24) is the general wine of the country, and is held in great estimation. The sweet white wines (Nos. 22 and 23) are not made to such an extent as the red, but are highly prized; they were drawn from large butts above ground; the red wine, on the contrary, was drawn from immense earthen jars, capable of holding three to four butts each, and kept in cellars.
23	Val de penäs - - -	Francesco Cannineda, grower, Val de penäs.	1851	31·3	
24	Val de penäs - - -	Francesco Cannineda, grower, Val de penäs.	1860	27·9	
25	Valencia - - -	Ramon Garzo, proprietor, Grao, Valencia.	1860	28·6	These samples, Nos. 25 and 26, were declared to be entirely free from any admixture of spirit. If made up for shipment they would have five gallons of spirit per pipe added, such being considered absolutely necessary for the preservation of the wine during the voyage, and not for the purpose of enhancing its value.
26	Valencia - - -	Puzol-Hermanos, proprietor, Grao, Valencia.	1860	25·9	
27	Valencia - - -	Puzol-Hermanos, proprietor.	1860	28·6	No. 27 is a sample of naturally sweet wine, and is made, in the first instance, without any addition of spirit, but when drawn off the lees (six months after it is made), 7½ gallons of spirit per butt were added. The cask from which the sample was drawn was about to be shipped for England, and the spirit added was considered to be absolutely necessary for the preservation of the wine during the voyage. The red dry wines are made in the province of Valencia to a considerably greater extent than the sweet ones.
28	Benicarlo - - -	Mr. J. C. O'Connor, Vice-Consul, Benicarlo, proprietor.	1861	23·9	Nos. 28 and 29 are samples of Benicarlo wine. The first is a pure, natural wine, without any admixture of spirit; the second was taken from a pipe prepared for the English market, to which five gallons of spirit had been added, entirely, as stated, for the purpose of preservation. This is the usual treatment of this wine for exportation, though half that quantity of spirit would be sufficient to preserve it in the country of production, as the natural wine would require spirit in the spring of the year following the vintage.
29	Benicarlo - - -	Mr. J. C. O'Connor, Vice-Consul, Benicarlo, proprietor.	1860	31·3	

PARTICULARS of Samples of WINE obtained in *Spain*, and *Portugal*, by Mr. *Bernard*—continued.

No. of Sample.	Name of the Wine.	Obtained from	Year of Vintage.	Strength.	OBSERVATIONS.
30	Alicante - - -	Messrs. Giro, Leach & Co., proprietors, Alicante.	1860	28·6	These are assured to me as pure natural wines, free from any addition of spirit. If intended for exportation, from five to seven gallons of Catalan spirit (about 60 over proof) would be added, as necessary for its preservation on the voyage, and to meet the change of climate.
31	Alicante - - -	Messrs. Giro, Leach & Co., proprietors, Alicante.	1860	29·2	
32	Malaga - - - -	The sons of Don Manuel Augustin Heridin, grower and proprietor.	1858	37·5	No. 32 sample represents a dry Malaga wine. No. 33 sample represents a sweet Malaga wine. These wines contain the usual quantity of spirit added by the growers in these districts, viz., nine gallons per butt, added between the first and second fermentation, such being deemed absolutely necessary for the purpose of preserving the wine either for home use or exportation.
33	Malaga - - - -	The sons of Don Manuel Augustin Heridin, grower and proprietor.	1857	29·9	
34	Malaga - - - -	The sons of Don Manuel Augustin Heridio, grower and proprietor.	1847	37·5	No. 34 is declared to be a natural wine, no spirit having been added at any stage of its manufacture. Its strength is stated to be entirely owing to an unusual method of treatment; the vines from which it was produced having been severely pruned, to concentrate their vigour into a few bunches of grapes on each.
35	- - - -	- - - -	—	—	Samples Nos. 35 to 37 were selected at Lisbon, to be forwarded, but upon after-consideration they appeared too highly fortified to be sufficiently suitable for the purpose intended. The wines of the present year, the only ones not fortified, were in a state of violent fermentation, and could not have been forwarded with safety.
36	—	—	—	—	
37	—	—	—	—	
38	Port - - - -	Joaquin de Souza, grower, Evidoza, Upper Corgo, Alto Douro.	1861	25·9	These samples, obtained from the farmers whose names are given opposite, are as yet free from any addition of spirit; the wines being still in a state of incomplete fermentation, will probably generate an additional amount of strength in the tonel or vat. They do not represent the finest class of wines, but a secondary quality; the best sorts are invariably fortified immediately after they are drawn from the press, in order to preserve their sweetness and body, as the manufacturers do not like to risk the safety of such wines by the omission of this operation.
39	Port - - - -	Salvador Paes, grower, Evidoza, Upper Corgo, Alto Douro.	1861	23·3	
40	Port - - - -	Antonio Borgas, grower, Corvas, Upper Corgo, Alto Douro.	1861	22·0	
41	Port - - - -	Leopoldina Pactico, grower, Valenca, Upper Corgo, Alto Douro.	1861	21·4	
42	Port - - - -	Jose Corred de Mello, grower, Pezo de Regoa, Alto Douro.	1861	23·3	
43	Port - - - -	Mr. Fladgate, grower, rearer, and shipper, Villa Nova, Oporto.	1860	34·0	This wine, obtained from Mr. Fladgate, of Oporto, was made without spirit in the first instance, but in June 1861, 10 gallons of the same wine, which had been fortified in the usual manner, were thrown in each pipe. The wine is still in a sound condition, and the admixture of this small quantity of prepared wine appears to have been sufficient to preserve it.
44	Port - - - -	Mr. Smithes, proprietor, Villa Nova, Oporto.	1861	25·9	This sample is a pure, natural wine, but it would not be allowed to remain long without some spirit being mixed with it.
45	Port - - - -	Mr. Smithes, proprietor, Villa Nova, Oporto.	1861	33·3	This sample was obtained from the same source as the above, and has had two almudes (one-eleventh part) of Brandy added per pipe.
46	Port - - - -	Messrs. Graham, Ellis & Co., proprietors, Villa Nova.	1860	35·4	This wine was prepared for the English market; about 5½ gallons of spirit per pipe being added in the December following the vintage, and at different times since then about 9½ gallons more, the spirit used being of the strength of 9° Tassa, = 33·6 over-proof, Sikes.
47	Port - - - -	Mr. Fladgate, grower, Villa Nova.	1861	23·9	No. 47 is a Douro wine, grown on the estate of Mr. Fladgate; the remainder were kindly obtained for me by him, and are denominated Figuera wines, and I am assured of the perfect purity of all of them.
48	Beira, or Figueras - -	Mr. Fladgate, proprietor, Villa Nova.	1861	20·8	
49	Beirada, or Figueras -	Mr. Fladgate, proprietor, Villa Nova.	1861	21·4	
50	Beirada, or Figueras -	Mr. Fladgate, proprietor, Villa Nova.	1861	23·9	
51	Beirada, or Figueras -	Mr. Fladgate, proprietor, Villa Nova.	1861	22·7	
52	Beirada, or Figueras -	Mr. Fladgate, proprietor, Villa Nova.	1861	22·7	
53	Port - - - -	Mr. Harris, proprietor, Villa Nova.	1834	27·2	This wine was made in 1834, entirely without the addition of spirit, under the French system adopted by Mr. Forrester, and was bottled the moment the fermentation was complete.
54	Port - - - -	Mr. James Forrester, proprietor and grower.	1859	32·6	This wine was fortified to the extent of only 2¾ gallons per pipe, and was bottled the year following the vintage, by Mr. J. Forrester.

ABSTRACT of the Samples of the WINES of *Spain* and *Portugal*, showing the Average Strength of the Wines of each District.

SPAIN.

Nos. of Samples.	Name of the Wine.	District.	Natural Wine.	Wine slightly Fortified.	Wine Fortified for English Market.
1 to 5 -	Vino fino - - - (Sherry.)	St. Lucar - -	27·0	—	—
6 to 10 -	Sherry - - -	Xeres - - -	27·2	30·7	—
11 to 18 -	Vino fino - - - (Amontillado, &c.)	St. Mary's - -	32·3	29·4	35·7
19 to 21 -	Montillã - - -	Montillã - -	31·7	—	—
22 to 24 -	Val de penãs - -	Val de penãs -	27·0	—	—
25 to 27 -	Valencia - - -	Valencia - -	27·2	—	28·6
28 and 29 -	Benicarlo - - -	Benicarlo - -	23·9	—	31·3
30 and 31 -	Alicante - - -	Alicante - -	28·9	—	—
32 and 33 -	Malaga - - -	Malaga - -	37·5	—	37·5 (Dry.) 29·9 (Sweet
34 - -	Malaga - - -	Malaga - -	(Exceptional.)	—	—

PORTUGAL.

Nos. of Samples.	Name of the Wine.	District.	Natural Wine.	Wine slightly Fortified.	Wine Fortified for English Market.
38 to 39 -	Port - - - -	Evidoza - -	24·6	—	—
40 - -	Port - - - -	Corvas - -	22·0	—	—
41 - -	Port - - - -	Valenca - -	21·4	—	—
42 - -	Port - - - -	Pezo - - -	23·3	—	—
43 to 46 -	Port - - - -	Villa Nova - -	25·9	33·6	35·4
47 - -	Port - - - -	Douro - -	23·9	—	—
			141·1		
		Total Average - -	23·5		
48 - -	Figuera - - -	Beira - - -	20·8	—	—
49 to 52 -	Figuera - - -	Beirada - -	22·6	—	—
53 - -	Port - - - -	Douro - - -	27·2 (Exceptional.)	—	—
54 - -	Port - - - -	Douro - - -	- -	32·6	—

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STATEMENT with respect to the WINES of *Sicily* and *Italy*, prepared from Reports of the late Mr. *Frederick Davies*, Secretary's Office, Her Majesty's Customs.

Sicily and Italy.

THE late Mr. Frederick Davies, having been selected to visit Italy, Venetia, and Sicily, for the purpose of procuring information respecting the natural strength of wine, proceeded in the first instance to Sicily, and reached Palermo on the 12th October. In a letter written to the Board of Customs from that place, Mr. Davies stated, that he had gathered much useful information on his way thither, which would facilitate his progress in the districts he had to visit; but that he was apprehensive the range of his inquiry would be more circumscribed than was contemplated, inasmuch as the means of communication between the places to be visited were but few, and at intervals of two or three days.

On the 16th October Mr. Davies reported that he had obtained from the stores of Messrs. Inghams, at Marsala (the most extensive of the wine establishments in Sicily), a sample of the Sicilian wine known as "Marsala," of the vintage of 1860, in its natural state, no spirit having been added to it in any shape whatever. This sample has not yet been received in London.

Sample No. 1.

From Palermo Mr. Davies proceeded to Messina, and obtained from the grower a sample of the Faro wine, which is reputed to be the strongest wine of the north-eastern district of Sicily. The wine sent is in its natural state, and of the vintage of 1860.

Sample No. 2.

Mr. Davies next obtained from the stores of the Benedictine monks, who were also the producers, a sample of the wine made at their vineyards in the neighbourhood of Mount Etna. The wine is known under the name of Terre Forte, and is considered to be the strongest wine of the eastern district of Sicily. The sample in this case is of the vintage of 1859, and free from the admixture of spirit during the process of manufacture or otherwise. The result of the testing has shown the Terre Forte wine to be rather more than seven per cent. stronger than the Faro wine, the former containing 29·9 per cent. of spirit and the latter containing 22·7 per cent. of spirit.

Sample No. 3.

On the 29th October Mr. Davies reported from Naples that he had obtained three samples of Neapolitan wine, viz.:—

Sample No. 4. Lachryma Christi,
Sample No. 5. Gallipoli, and
Sample No. 6. Taranto.

The Lachryma Christi is produced from vines grown at the base of Mount Vesuvius, and is reputed to be the strongest of the wines grown in the Naples district. The sample sent was obtained from the proprietor of the estate on which the wine was made in 1860, and is in its natural state. The Gallipoli and Taranto wines are produced respectively in the neighbourhood of Gallipoli and Taranto; but Mr. Davies did not obtain his samples of them in those localities, as, irrespective of the circumstance that time and the means of locomotion would not admit of his going to those places, he found that the disturbed state of the southern districts of Italy rendered it inexpedient that he should do so. The samples were given to him by a gentleman to whom he was introduced by the British Consul at Naples, and who assured him that they were *bonâ fide* samples of the strongest wines of the province of Puglia or Terra d'Otranto, having been drawn from casks sent to him by the grower of the vines from which the wines were made, and who furnished him with the particulars of the condition, &c. of the wine. They are both of the vintage of 1860, but the Gallipoli is not in a pure state, having had (as a precautionary measure, not from necessity), four per cent. of spirit, believed to be of the ordinary strength of Cognac, added to it since it was made, for its preservation.

The actual per-centages of spirit in the samples sent are as follows, viz.:—

Lachryma Christi - - - - -	18·9
Gallipoli - - - - - - -	26·5
Taranto - - - - - - -	23·9

But,

But, deducting the four per cent. of spirit added to the Gallipoli, it would give the natural strength of the wine as, say, 22 per cent. Sicily and Italy.

Having completed his inquiries at Naples, Mr. Davies proceeded to the Papal States; but his progress was delayed by a serious accident to the train in which he was travelling from Civita Vecchia to Rome, and by the flooded state of the country, consequently he did not reach Rome until the 3d November.

On the following day, Mr. Davies reported that he had experienced considerable difficulty in obtaining consistent information as to the locality in which the strongest wines were produced, and also in procuring samples; but that the prevailing opinion was in favour of Genzano; and Mr. Davies expressed his conviction that in sending samples of the wines of that locality the Board of Customs would be furnished with specimens of the strongest wines of the Papal States.

Two samples of Genzano, of the vintage of 1850, in its pure and natural state (one white and the other red), were obtained from the proprietor of the vineyard on which the grapes were grown, and who believed the wines to be of the same degree of strength. The result of the testing has shown that this opinion was well founded, there being a difference of only six-tenths between them, the white Genzano containing 20·8 and the red 20·2 per cent. of spirit. Sample No. 7. Sample No. 8.

Mr. Davies also procured from a dealer in Rome, under circumstances which justified him in believing that the wines were pure and in their natural state, a sample of white Genzano, and of a red wine, known as Marino, both of the vintage of 1861, and they have been found to contain respectively 17·1 and 17·7 per cent. of spirit. Sample No. 9. Sample No. 10.

Mr. Davies was unable to obtain any Roman wine of the description required of the vintage of 1860.

The last sample advised by Mr. Davies (on the 9th November) was a specimen of Tuscan wine obtained at Montepulciano, from the proprietor of the vineyard on which the grapes were grown. The wine is in a pure and natural state, of the vintage of 1861, and is known as Vino Nobile. Mr. Davies at the same time stated that the stock of wine of all sorts produced in Tuscany was, for the most part, exhausted, and that he had been unable to procure samples of last year's growth. The strength of this wine cannot be given, as the sample has not yet reached London.* Sample No. 11.

The further researches of Mr. Davies were cut short by his illness and subsequent death, on the 15th November, at Pisa, which place he had reached on his way to Genoa; but it will be observed that he had visited the greater portion of the district allotted to him, and had obtained three samples of Sicilian wine, three samples of Neapolitan wine, four samples of Roman wine, and one sample of Tuscan wine.

The greatest natural strength of the—

Sicilian wine received is 29·9 per cent. (sample, No. 3).
Neapolitan wine received is 23·9 per cent. (sample, No. 6).
Roman wine received is 20·8 per cent. (sample, No. 7).

From the best information that can be obtained in this country, it appears that in a few localities in the north of Italy, especially at Piedmont at the foot of the Alps, wine is produced of very good quality, but that the quantities of such wine are so small, that all trade therein is precluded, except in the immediate vicinity of its production. It is represented that the great bulk of Italian wines is of inferior quality; that they are generally made without much care or attention, little capital being expended in providing proper vats and other apparatus necessary for the process of wine making; that they are usually consumed in the country in the course of two or three years, and that they are generally considered unfit to bear the effects of a sea voyage; an opinion which has been confirmed by some small importations that have been made into this country.

Piedmont is the principal wine producing district, and the wines of Bellit and Asti are the best known, the latter being both still and sparkling. Since 1849 the

* This sample was received in London subsequently to the date of this report, and was found to contain 17·7 per cent. of spirit.

Sicily and Italy.

the vines of Italy have suffered severely from the effects of the vine disease, and Piedmont, which formerly supplied all the surrounding districts, has, until recently, been obliged to import wines. This year, however, the vine disease has disappeared, and the crops have been abundant in Piedmont.

In addition to the fact that the north of Italy produces only enough for its own consumption, the distance from this country, and the consequent difficulty and expense of transit, under existing circumstances, at present preclude the probability of any export trade in wine worth appreciating being carried on between Italy and the United Kingdom.

The general character of the Italian wines renders it unlikely that any of them would, upon being tested, show any great natural alcoholic strength, and therefore it does not appear necessary, for the purpose of the present inquiry, to take any further steps to procure samples of such wines; but if it be deemed desirable to pursue the matter further, Mr. Montagu Yeats Brown, British Consul at Genoa, who is represented to be well acquainted with the northern parts of Italy, and the natural productions of these districts, would, no doubt, be able and willing, if applied to, to obtain samples and information upon the subject.

Custom-house, London, 13 January 1862.

PARTICULARS of the Samples of WINE obtained in *Sicily* and *Italy* by the late Mr. *Davies*.

Number of Sample.	Name of the Wine.	From whom obtained.	Year of Vintage.	Strength per Cent.	OBSERVATIONS.
	SICILIAN WINE:				
1	Marsala - - - -	Messrs. Inghams, at Marsala.	1860	This sample has not arrived.	The stores of Messrs. Inghams at Marsala are the most extensive of the wine establishments in Sicily. The wine, of which a sample has been sent, is in its natural state, no spirit having been added to it in any shape whatever.
2	Faro wine - - -	From the grower - -	1860	22·7	This wine is in its natural state, no spirit having been added to it in any shape. The Faro wine is reputed to be the strongest wine of the north-eastern district of Sicily.
3	Terre Forte - - -	The Benedictine Monks (the growers).	1859	20·9	This wine is the produce of the land in the neighbourhood of Mount Etna, and is reputed to be the strongest wine of the eastern district of Sicily. The wine is in its natural state, no spirit having been added.
	NEAPOLITAN WINE:				
4	Lachryma Christi - -	From the grower - -	1860	18·9	This wine is in its natural state, no spirit having been added for any purpose. It is reputed to be the strongest of the wines grown in the Naples district.
5	Gallipoli - - -	From a gentleman who had the wine direct from the grower.	1860	26·5	This wine is not in its natural state, about four per cent. of spirit having been added to it after it was drawn off into cask. The strength of the spirit was not known, nor could a sample of it be procured, but it was represented to be of the strength of ordinary Cognac.
6	Taranto - - - -	From a gentleman who had the wine direct from the grower.	1860	23·9	Wine in its natural state, no spirit having been added. These samples (Nos. 5 and 6) are stated to represent the strongest wines of the district of Apulia (Puglia), and were grown respectively in the neighbourhood of Gallipoli and Taranto.
	ROMAN WINE:				
7	Genzano (white) - -	Mr. Jacobini, the grower	1850	20·8	Some difficulty was experienced in obtaining consistent information as to the locality in which the strongest wines are produced, but the prevailing opinion is in favour of Genzano. The wine sent (Nos. 7 and 8) is in its natural state, there being no admixture of any kind with it. No samples of the vintage of 1860 could be procured.
8	Genzano (red) - -	Mr. Jacobini, the grower	1850	20·2	
9	Genzano (white) - -	A dealer in wines in Rome	1861	17·1	These wines (Nos. 9 and 10) are believed to be in their natural state, and free from any admixture of spirit.
10	Marino - - - -	A dealer in wines in Rome	1861	17·7	
	TUSCAN WINE:				
11	Vino Nobile - - -	Signor Niccola Cerpari, of Montepulciano, the grower.	1861	*See* note on page 27.	The wine is in its natural state, no spirit having been added to it either in the manufacture or for the purpose of preservation or sale. The stock of wine of all sorts produced in Tuscany being for the most part exhausted, samples of last year's growth could not be procured.

SUMMARY of the preceding REPORTS and STATEMENTS.

Summary.

THE accompanying Reports and Statements show very fully the proceedings of the four gentlemen who were selected by the Board of Customs to visit the wine-producing countries, and the particulars of the several samples of wine procured by them, with a view to determine, as far as practicable, what may be deemed the greatest natural strength of wine. It is only necessary, therefore, in order to complete the subject, to give a brief summary of the samples transmitted, and of the result of the testing in this country.

The total number of samples received from the various districts, including the two samples of "Vin de Beaune," not numbered, and the two samples forwarded direct to London by the Mayor of St. George (all of which are included in Mr. Ogilvie's list), amounts to 149, viz.:—

From France	59
„ Switzerland	3
„ Germany (the Rhine)	7
„ Bavaria	4
„ Hungary	11
„ Austria	5
„ Spain	34
„ Portugal	17
„ Sicily	2
„ Naples	3
„ Papal States	4
TOTAL	149

Of these samples, however, 24 do not represent pure and natural wine, viz.:—

Samples Nos. 1, 2, 3	From France.	
„ Nos. 6, 7, 8, 9. 11, 12, 13, 14, 15, 16, 17, 18, 27. 29. 32, 33	„	Spain.
„ Nos. 43. 45, 46. 54	„	Portugal.
„ No. 5	„	Naples.

and they are, therefore, excluded from the statement on the following page, which shows the result of the test of the reputed pure samples only.

Summary.

STATEMENT showing the different Degrees of STRENGTH exhibited by the Samples represented to be Pure, and the Number of Samples under each of such Degrees.

COUNTRY.	15·4 per Cent.	16·0 per Cent.	16·5 per Cent.	17·1 per Cent.	17·7 per Cent.	18·3 per Cent.	18·9 per Cent.	19·6 per Cent.	20·2 per Cent.	20·8 per Cent.	21·4 per Cent.	22·0 per Cent.	22·7 per Cent.	23·3 per Cent.	23·9 per Cent.	24·6 per Cent.	25·2 per Cent.	25·9 per Cent.	26·5 per Cent.	27·2 per Cent.	27·9 per Cent.	28·6 per Cent.	29·2 per Cent.	29·9 per Cent.	31·3 per Cent.	32·0 per Cent.	33·3 per Cent.	37·5 per Cent.	Total Number of Samples.
France	–	1	1	4	2	2	2	5	4	9	3	6	4	4	3	1	1	–	–	2	2	–	–	–	–	–	–	–	56
Switzerland	1	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3
Germany	–	–	–	–	–	–	–	–	1	–	2	3	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	7
Bavaria	–	–	–	–	–	–	–	–	–	1	2	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4
Hungary	–	–	–	–	–	–	–	1	3	1	1	–	–	1	–	1	2	–	–	–	–	1	–	–	–	–	–	–	11
Austria	–	–	–	2	–	–	–	–	1	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
Spain	–	–	–	–	–	–	–	–	–	–	–	1	–	–	1	–	–	1	2	3	2	2	1	1	1	1	1	1	18
Portugal	–	–	–	–	–	–	–	–	–	1	2	1	2	2	2	–	–	2	–	1	–	–	–	–	–	–	–	–	13
Sicily	Sample No. 1, Marsala, not arrived					–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	2
Naples	–	–	–	–	–	–	1	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	2
Papal States	–	–	–	1	1	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4
Tuscany	Sample not arrived, 13 January 1862 *						–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
TOTAL	1	1	1	8	3	3	3	6	10	13	10	12	9	8	7	2	3	3	2	6	4	3	1	2	1	1	1	1	125

* *See* note on page 27.

Summary.

From this statement it will be seen that the greatest per-centage of spirit contained in any of the samples represented as pure, is 37·5, and the particular sample which gives this result is the Malaga Wine, No. 34 in Mr. Bernard's list. This wine was produced in the year 1847 by very extensive pruning of the vine, and, even admitting its purity (about which Mr. Bernard would appear to entertain some doubt), it must be looked upon as a very exceptional case; and it is worthy of note that the strongest of the fortified wines, sample No. 32 Malaga, only contains 37·5 per cent. of spirit.

The next strongest pure wines, containing respectively 33·3 and 32·0 per cent. of spirit, are the Montillã samples, Nos. 19 and 20, produced in the years 1840 and 1845. There does not appear to be any good reason to doubt the purity of these wines; and as the strength of sample No. 19 has been tried, not only by the usual process of testing by the hydrometer after distillation, but also by ascertaining the specific gravity of the distillate; and as the result was exactly the same by both methods, 33·3 per cent. may be taken to be the greatest quantity of spirit contained in any of the samples of natural wine obtained from the wine-producing countries.

The statement also shows that the strongest of the samples from each country contained the following per-centages of spirit, viz.:—

From France - - -	27·9 per cent.	-	Samples 56 and 57.
Switzerland - -	18·3 ditto	-	ditto 19.
Germany - -	22·7 ditto	-	ditto 3.
Bavaria - - -	22·0 ditto	-	ditto 10.
Hungary - -	28·6 ditto	-	ditto 17.
Austria - - -	23·3 ditto	-	ditto 26.
Spain - - -	37·5 ditto	-	ditto 34;
or excluding No. 34,	33·3 ditto	-	ditto 19.
Portugal - -	27·2 ditto	-	ditto 53.
Sicily - - -	29·9 ditto	-	ditto 3.
Naples - - -	23·9 ditto	-	ditto 6.
Papal States - -	20·8 ditto	-	ditto 7.

It may further be observed, that of the 125 samples included in the tabular statement,—

14	represent wine containing	less than 18 per cent.	- -	Class (A.)
89	,, ,,	18 and less than 26 per cent.	-	Class (B.)
22	,, ,,	26 ,, 40 ,,	-	Class (C.)

viz.,—

Country.	Class (A.)	Class (B.)	Class (C.)	Total Samples.
From France - - - - - - -	8	44	4	56
,, Switzerland - - - - - -	2	1	- -	3
,, Germany - - - - - - -	- -	7	- -	7
,, Bavaria - - - - - - -	- -	4	- -	4
,, Hungary - - - - - - -	- -	10	1	11
,, Austria - - - - - - -	2	3	- -	5
,, Spain - - - - - - - -	- -	3	15	18
,, Portugal - - - - - - -	- -	12	1	13
,, Sicily - - - - - - -	- -	1	1	2
,, Naples - - - - - - -	- -	2	- -	2
,, Papal States - - - - - -	2	2	- -	4
	14	89	22	125

Custom House, London,
14 January 1862.

Custom House, London,
12 April 1862.

F. G. GARDNER,
Secretary.

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